

16-12-13

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐	AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐			
Date :	Step #:	QTY Effective :		MRB (QSI042) Approval	
Description Work Order Deviation		Disposition		Completed By	
				Lead hand / Supervisor Approval Verification	
				QC / QA Coordinator Approval	
Root Cause		FAULT CATEGORY			
Environment ☐	No Re-verification ☐	Pressure/Forced ☐	Temperature/Cure ☐	Power Loss/Surge ☐	Positioned Wrong ☐
Design ☐	Operator ☐	Bending ☐	Set-up ☐	Folio/Program ☐	Outside Dimensions ☐
Doc/Data ☐	Offset/Setup ☐	Centre Not Concentric ☐	BOM/Route ☐	Grain ☐	Over/Under tolerance ☐
Equip/Tooling ☐	Supplier ☐	Cracks ☐	Broken/Damage/Defect ☐	Weld ☐	Part Incorrect ☐
Handling/Pre ☐	Training ☐	Crimp/Kink/Ripple/Wave ☐	Inspection Incomplete/Unqualified ☐	Wrong Stock Pulled ☐	Part Lost/Missing ☐
Material ☐	Use for Testing ☐	Cuffs ☐	Contamination ☐	Out of Sequence ☐	Part Moved ☐
Internal Transport ☐	Poor Information ☐	Crushing ☐	Countersink ☐	Off-set ☐	Drawing ☐
Tribal Knowledge ☐	Rushing ☐	Heat Treat ☐	Cut Too Short ☐	Mislabeled ☐	Finish ☐
LOA ☐	Product Improvement ☐	Wave/Twist in Tube ☐	Instructions Incomplete/Unclear ☐	Fit/Function ☐	Misread ☐
Substation ☐	Process Improvement ☐	Marks/Chatter ☐	Drill Holes ☐	Misaligned/off center ☐	Turning Sequence ☐
Past Expiry Date ☐	Manufacturing Process ☐	OTHER :			
Misidentified ☐	Past Due ☐				

Work Order ID 154270

Wednesday, December 07, 2016 11:07:50 A

154270

Page 2

Item ID: 644.4112

Accept

N900040100Setup Start ***NS1***

Revision ID:

Stop ***NS2***

Item Name: Spacer

Start Date: 12/23/2016 Start Qty: 14.00

14

Cust Item ID:

Required Date: 12/23/2016 Req'd Qty: 14.00

14

Customer:

Reference:

Approvals:

Process Plan: _____

Date: _____

Tooling: _____

Date: _____

Run Start ***NR1***

QC: _____

Date: _____

SPC (Y/N): _____

Date: _____

Stop ***NR2***Sequence ID/
Work Center IDOperation
DescriptionSet Up/
Run Hours

Tool ID

Tool #

Plan
CodeAccept
QtyReject
QtyReject
NumberInsp.
Stamp

130

QC8- Inspect parts - second check

0.00

130

QC

Memo

0.05

Quality Control

14 _____ SL16-12-13

140

Outsource process-Anodize per QSI017 4.1.10.1

0.00

140

Outsource4

Memo

139.99

Outsource process - Anodize

Issue P/O to ATG : 346441- Black Anodize as per Dwg
Note 4

Certification of Conformity is required

14 _____ DEC 15 2016 D46
13
14

150

Receive & Inspect for Damage & Mat'l Certs

0.00

150

Packaging

Memo

0.05

Packaging

14x SP/6-12-22

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

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Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐	AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐			
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Root Cause Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐ No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐		FAULT CATEGORY Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐ Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐ Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Mislabeled ☐ Fit/Function ☐ Misaligned/off center ☐ Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐			
OTHER : ☐					

Work Order ID 154270

Wednesday, December 07, 2016 11:07:50 A

154270

Page 3

Item ID: 644.4112

Accept

N900040100

Setup Start

NS1

Revision ID:

Stop

NS2

Item Name: Spacer

Start Date: 12/23/2016 Start Qty: 14.00

14

Cust Item ID:

Required Date: 12/23/2016 Req'd Qty: 14.00

14

Customer:

Reference:

Approvals:

Process Plan:

Date:

Tooling:

Date:

Run Start

NR1

QC:

Date:

SPC (Y/N):

Date:

Stop

NR2Sequence ID/
Work Center IDOperation
DescriptionSet Up/
Run Hours

Tool ID

Tool #

Plan
CodeAccept
QtyReject
QtyReject
NumberInsp.
Stamp

155

QC5- Inspect part completeness to step on W/O

0.00

155

QC

Memo

0.05

Quality Control

(14)

16-12-22

DAS
9
9-89

160

0.00

160

SprayPaint

Memo

0.00

Spray Painting

PRIME AS PER DWG AND NOTE 4
BATCH: 136429

14

17-02-01

PAINT AS PER DWG AND NOTE 4
BATCH: 136434

165

QC14- Inspect Spray Paint

0.00

165

QC

Memo

0.00

Quality Control

14

DAS
38
1-89

FEB 02 2017

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐	AGAINST DEPARTMENT/PROCESS <table style="width:100%; border: none;"> <tr> <td style="border: none;">Skid-tube ☐</td> <td style="border: none;">Cross tube ☐</td> <td style="border: none;">Water Jet ☐</td> <td style="border: none;">Engineering ☐</td> </tr> <tr> <td style="border: none;">Machining ☐</td> <td style="border: none;">Small Fab ☐</td> <td style="border: none;">Prod. Eng. Coord. ☐</td> <td style="border: none;">Quality ☐</td> </tr> <tr> <td style="border: none;">Thermoforming ☐</td> <td style="border: none;">Finishing ☐</td> <td style="border: none;">Rec/Store/Packaging ☐</td> <td style="border: none;">Other ☐</td> </tr> <tr> <td style="border: none;">Large Fab ☐</td> <td style="border: none;">Composite ☐</td> <td style="border: none;">Supplier ☐</td> <td></td> </tr> </table>				Skid-tube ☐	Cross tube ☐	Water Jet ☐	Engineering ☐	Machining ☐	Small Fab ☐	Prod. Eng. Coord. ☐	Quality ☐	Thermoforming ☐	Finishing ☐	Rec/Store/Packaging ☐	Other ☐	Large Fab ☐	Composite ☐	Supplier ☐																																																
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Work Order ID 154270

Wednesday, December 07, 2016 11:07:50 A

154270

Page 4

Item ID: 644.4112

Accept

N900040100

Setup Start

NS1

Revision ID:

Stop

NS2

Item Name: Spacer

Start Date: 12/23/2016 Start Qty: 14.00

14

Cust Item ID:

Required Date: 12/23/2016 Req'd Qty: 14.00

14

Customer:

Reference:

Approvals:

Process Plan: _____

Date: _____

Tooling: _____

Date: _____

Run Start

NR1

QC: _____

Date: _____

SPC (Y/N): _____

Date: _____

Stop

NR2Sequence ID/
Work Center IDOperation
DescriptionSet Up/
Run Hours

Tool ID

Tool #

Plan
CodeAccept
QtyReject
QtyReject
NumberInsp.
Stamp

180

Identify as per dwg & Stock Location: CCT 131

0.00

180

Packaging

Memo

0.02

14DAS
6
9-89~~FEB 0 1 2017~~

Packaging

IDENTIFY AS PER APICAL MPP-120 BY STAMPING P# AND REV

190

QC21- Final Inspection - Work Order Release

0.00

190

QC

Memo

0.23

17/02/02 

Quality Control

FEB 02 2017



DQA: _____ Date: _____



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OTHER : _____					

Picklist Print

Wednesday, December 07, 2016 11:07:52 AM

Page 1

Work Order ID: 154270

154270

Parent Item: 644.4112

644 4112

Parent Item Name: Spacer

Start Date: 12/23/2016

Required Date: 12/23/2016

Start Qty: 14.00

Required Qty: 14.00

Comments: IPP REV:A NEW ISSUE 16-12-06 JLM VERIFIED BY:DD

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
M6061T6R0.750		Purchased		No			f	53.7600		4.13			
M6061T6R0 750									**			16-12-13	DAS 32 9-89
6061-T6 Round Bar .750"													

Location

Loc Qty

Loc Code

MAT012

53.76

m135377

0.6

m135612

5.16

m135861

24

m136327

24

6.698'

DQA: _____ Date: _____



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OTHER : ☐					

APICAL

INDUSTRIES, INC.

ENGINEERING CHANGE NOTICE NO. 04489

SHEET 1 OF 1

DWG NO. 644.4100

REV: F

PREPARED BY: J. BECKER

DATE: 04/08/14

EFFECT ON DWG
☐ INC. ☒ UNINC.

DWG TITLE: PIVOT STEP ASSY

APPROVED BY:

ENGR

MFG

QC

EFF:

NEXT ORDER

TRANSACTION
A-ADD
R-REVISE

CODES (TC)
C-CREATE
D-DELETE

REASON: UPDATE NOTE 4, FINISH SPECIFICATION.

NOTES

1. IDENTIFY ALL PARTS IN ACCORDANCE WITH MPP-120
2. MATERIAL: 2024-T3 ALUMINUM
3. MATERIAL: 6061-T6 ALUMINUM
4. FINISH IAW MPP-172 SECTION 2.1, SECTION 3.1, SECTION 4.1, SECTION 5.2.
5. MATERIAL: MDS-FILLED NYLON 6/6 SHEET, CUT OD CIRCLE USING 2" GASKET PUNCH, CUT ID HOLE USING 1/4" GASKET PUNCH
6. MATERIAL: MDS-FILLED NYLON 6/6 SHEET, CUT OD CIRCLE USING 2" GASKET PUNCH, CUT ID HOLE USING 5/16" GASKET PUNCH
7. DIMENSION VALUE HAS FINISH COATING OF 6-10 MIL (.006-.010) TAKEN INTO CONSIDERATION
8. ADD ADDITIONAL WASHER UNDERNEATH CASTLE NUTS IF NECESSARY.
9. FINISH: HARD ANODIZE IAW MIL-A-8625 TYPE III CLASS 2, COLOR BLACK.

SHOP COPY
RETURN TO
ENGINEERING
UNCONTROLLED COPY
SUBJECT TO AMENDMENT
WITHOUT NOTICE
WORK ORDER
NO. 154270ML5

16-12-07

SHEET 1, NOTES IS:

DOCUMENTS EFFECTED:

☐ MDL ☐ INSTALL INSTRU ☐ ICA ☐ BOM

CHANGE CATEGORY
☐ MAJOR ☒ MINOR

DER REVIEW REQUIRED
☐ YES ☒ NO

APICAL
INDUSTRIES, INC.

ENGINEERING CHANGE NOTICE NO.

04286

SHEET 1 OF 1

DWG NO. 644.4100

REV: F

PREPARED BY J. SOTO

DATE: 12/04/2013

EFFECT ON DWG
☐ INC. ☒ UNINC.

DWG TITLE: PIVOT STEP ASSY

APPROVED BY: ENGR *[Signature]*

MFG *[Signature]*

QC

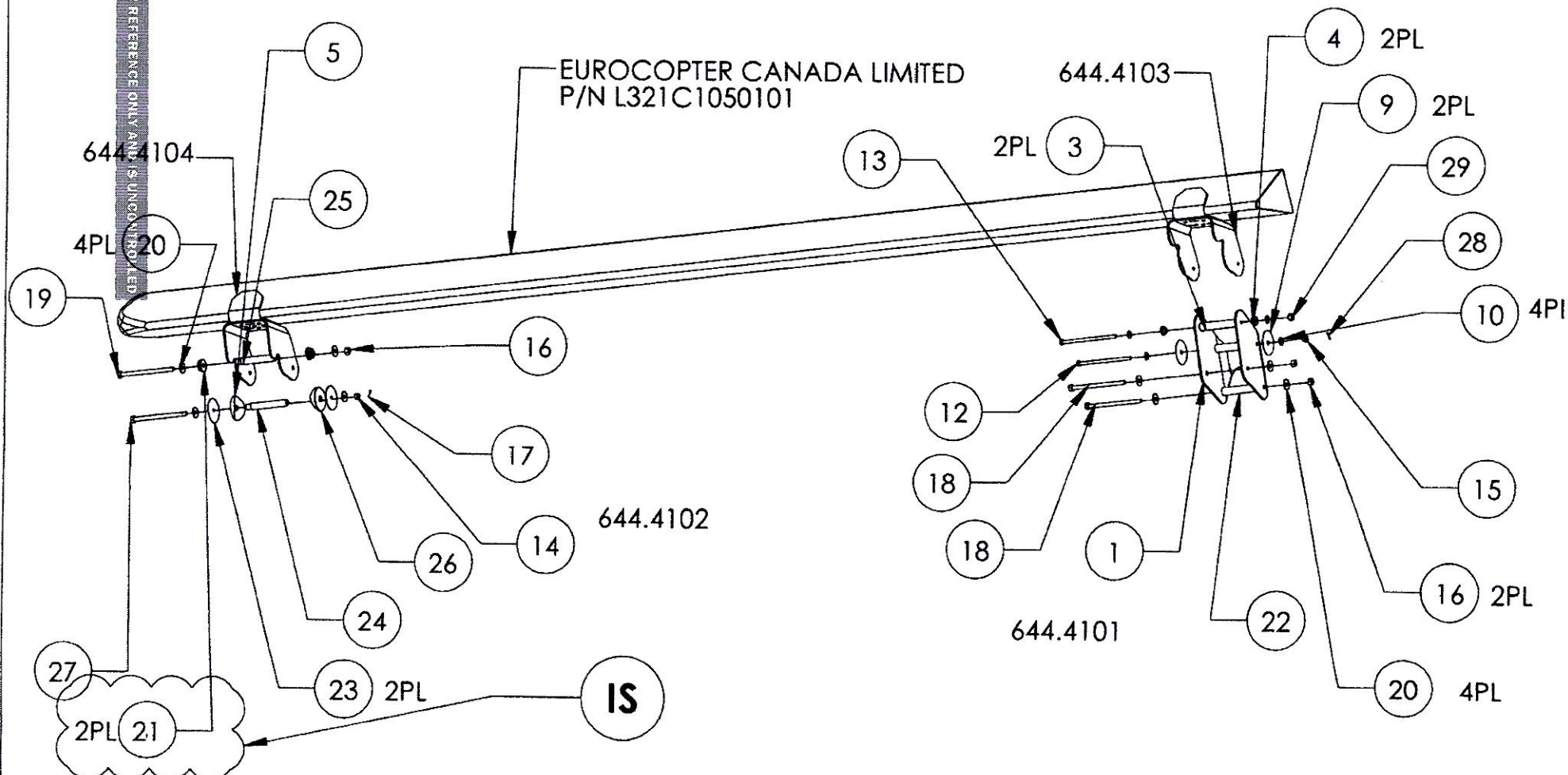
EFF. NEXT ORDER

TRANSACTION CODES (TC):
A-ADD
R-REVISE
C-CREATE
D-DELETE

REASON: REVISED F/N CALL OUT FROM 22 TO 21

ECR: 13-151

SHEET 1, ZONE D1 IS:



DOCUMENTS EFFECTED:

☐ MDL ☐ INSTALL INSTRUCTIONS ☐ ICA ☐ FMS ☐ BOM

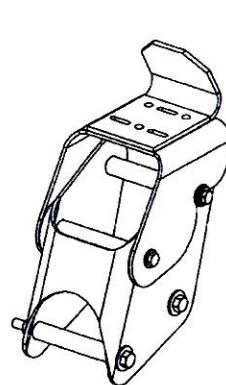
CHANGE CATEGORY
☐ MAJOR ☒ MINOR

DER REVIEW REQUIRED
☐ YES ☒ NO

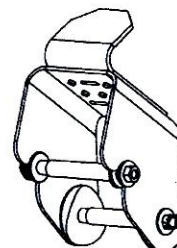
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NOTES:

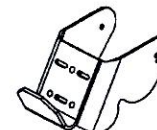
1. IDENTIFY ALL PARTS IN ACCORDANCE WITH MPP-120
- 2 MATERIAL: 2024-T3 ALUMINUM
- 3 MATERIAL: 6061-T6 ALUMINUM
- 4 FINISH: HARD ANODIZE IAW MIL-A-8625 TYPE III CLASS 2, COLOR BLACK; PRETREAT PR-148 ADHESION PROMOTER, PRIME WITH DESOTO 515X349 IAW BMS 10-79 TYPE III CLASS A GRADE A, POLYURETHANE PAINT CARDINAL 6409-RD03-S WITH CATALYST 340HP.
- 5 MATERIAL: MDS-FILLED NYLON 6/6 SHEET, CUT OD CIRCLE USING 2" GASKET PUNCH, CUT ID HOLE USING 1/4" GASKET PUNCH
- 6 MATERIAL: MDS-FILLED NYLON 6/6 SHEET, CUT OD CIRCLE USING 2" GASKET PUNCH, CUT ID HOLE USING 5/16" GASKET PUNCH
- 7 DIMENSION VALUE HAS FINISH COATING OF 6-10 MIL (.006-.010) TAKEN INTO CONSIDERATION
8. ADD ADDITIONAL WASHER UNDERNEATH CASTLE NUTS IF NECESSARY.
- 9 FINISH: HARD ANODIZE IAW MIL-A-8625 TYPE III CLASS 2, COLOR BLACK.



644.4101



644.4102

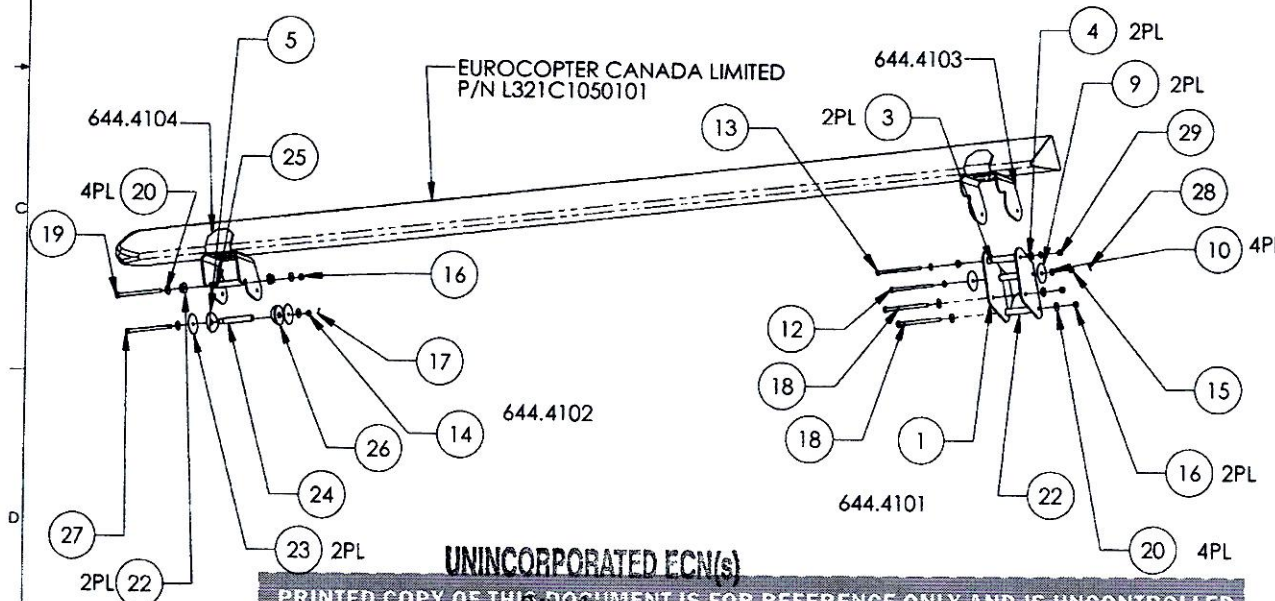


644.4103



644.4104

REV.	DESCRIPTION	DATE	APPROVED
A	INCORPORATED ECH 01370, 01372, 01382 & 01387	11-29-05	S. JOSEPH
B	INCORPORATED ECH 01370, 01418, 01786 & 0183M	05-21-07	P. BRAVO
C	INCORPORATED ECH 01508, 0226L, 03022	12-14-10	P. BRAVO
D	INCORPORATED ECH 03111, 03113, 03206, & 03740	12-10-12	P. BRAVO
E	INCORPORATED ECH 03941	06-18-13	P. BRAVO
F	INCORPORATED ECH 04004	7-26-13	P. BRAVO



QTY	REV	PART #	DESCRIPTION	MATL	SPEC.
1	1	29	601.3273	LOCKNUT FULL	MS21044N4
1	1	28	601.2640	COTTER PIN	MS24665-132
1	1	27	601.2328	BOLT, HEX	ANS-45
1	1	26	644.4124	WASHER, PIVOT	△△△
1	1	25	644.4123	FWD CROSSTUBE BUSHING	△△△
1	1	24	644.4122	FWD CROSSTUBE BUSHING	△△△
2	1	23	644.4121	WASHER, NYLON	△△△
1	1	22	644.4120	SPACER, CROSS-TUBE	△△△
2	1	21	644.4119	SPACER, FWD STOP	△△△
4	1	20	601.2110	WASHER, FLAT THICK	MS1149C 0563R
1	1	19	601.2250	BOLT, HEX	ANS-50
2	1	18	601.2249	BOLT, HEX	ANS-43A
1	1	17	601.3315	COTTER PIN	MS24665-210
1	1	16	601.3272	LOCKNUT FULL	MS21044N5
1	1	15	601.1435	NUT, HEX CASTLE FULL	AN310-4
1	1	14	601.3270	NUT, HEX CASTLE FULL	AN310-5
1	1	13	601.3407	BOLT, HEX	AN4-47A
1	1	12	601.2434	BOLT, HEX	AN4-45
6	3	11	601.2326	RIVET, COUNTERSUNK	MS20426ADS-8
4	1	10	601.0863	WASHER, THICK	MS1149C 0403R
2	1	9	644.4118	WASHER, NYLON	△△△
1	1	8	644.4117	BRACKET, FWD PIVOT	△△△
1	1	7	644.4116	BRACKET (SMALL), FWD	△△△
1	1	6	644.4115	BRACKET (SMALL), AFT	△△△
1	1	5	644.4114	WASHER, PIVOT	△△△
2	1	4	644.4113	SPACER, STOP	△△△
2	1	3	644.4112	SPACER	△△△
1	1	2	644.4111	BRACKET, AFT PIVOT	△△△
1	1	1	644.4110	BRACKET (LARGE), AFT	△△△
1	1	1	644.4104	FWD BRACKET ASSY	
1	1	1	644.4103	AFT BRACKET ASSY	
1	1	1	644.4102	PIVOT STEP ASSY	
1	1	1	644.4101	PIVOT STEP ASSY	

QTY	REV	PART #	DESCRIPTION	MATL	SPEC.
1	1	1	644.4104	FWD BRACKET ASSY	
1	1	1	644.4103	AFT BRACKET ASSY	
1	1	1	644.4102	PIVOT STEP ASSY	
1	1	1	644.4101	PIVOT STEP ASSY	
1	1	1	644.4100	PIVOT STEP ASSY	

ORIGINAL DATE 08-01-05	DESIGNED BY S. JOSEPH	CHECKED BY S. JOSEPH
DRAWING APPROVAL S. JOSEPH 08-29-05		
CONTRACT NO.		
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES ARE: 3 PLACE DECIMALS ± .01 2 PLACE DECIMALS ± .010 ANGLES ± .5°		
SEE B	CAGE CODE 07M26	DWG. NO. 644.4100
SCALE: NONE		REV. F

PARTS LIST

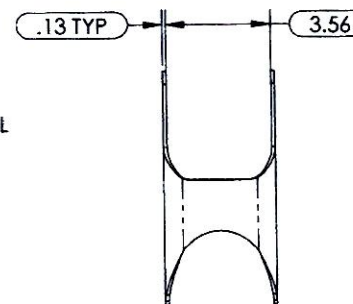
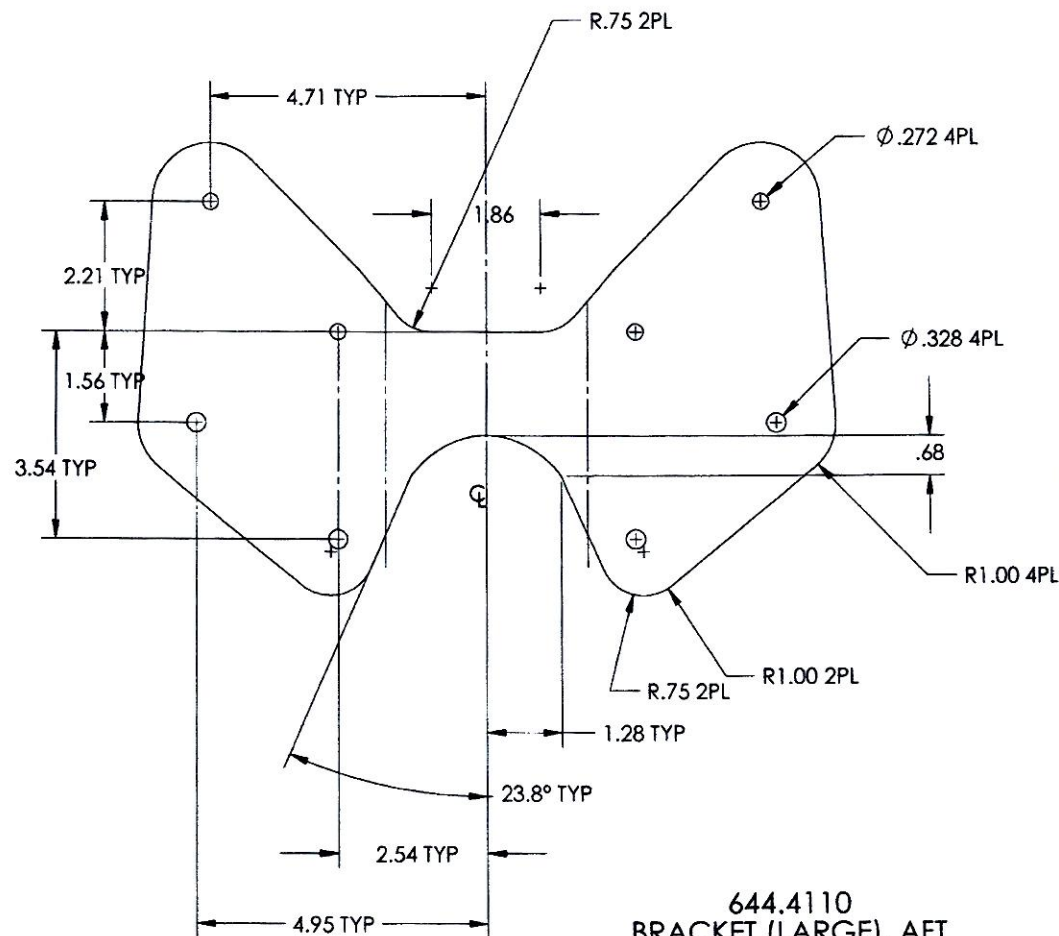
APICAL INDUSTRIES
2608 TEMPLE HEIGHTS DR.
OCEANSIDE, CA. 92056-3512 (760)724-5300

PIVOT STEP ASSY

644.4100

SHEET 1 OF 16

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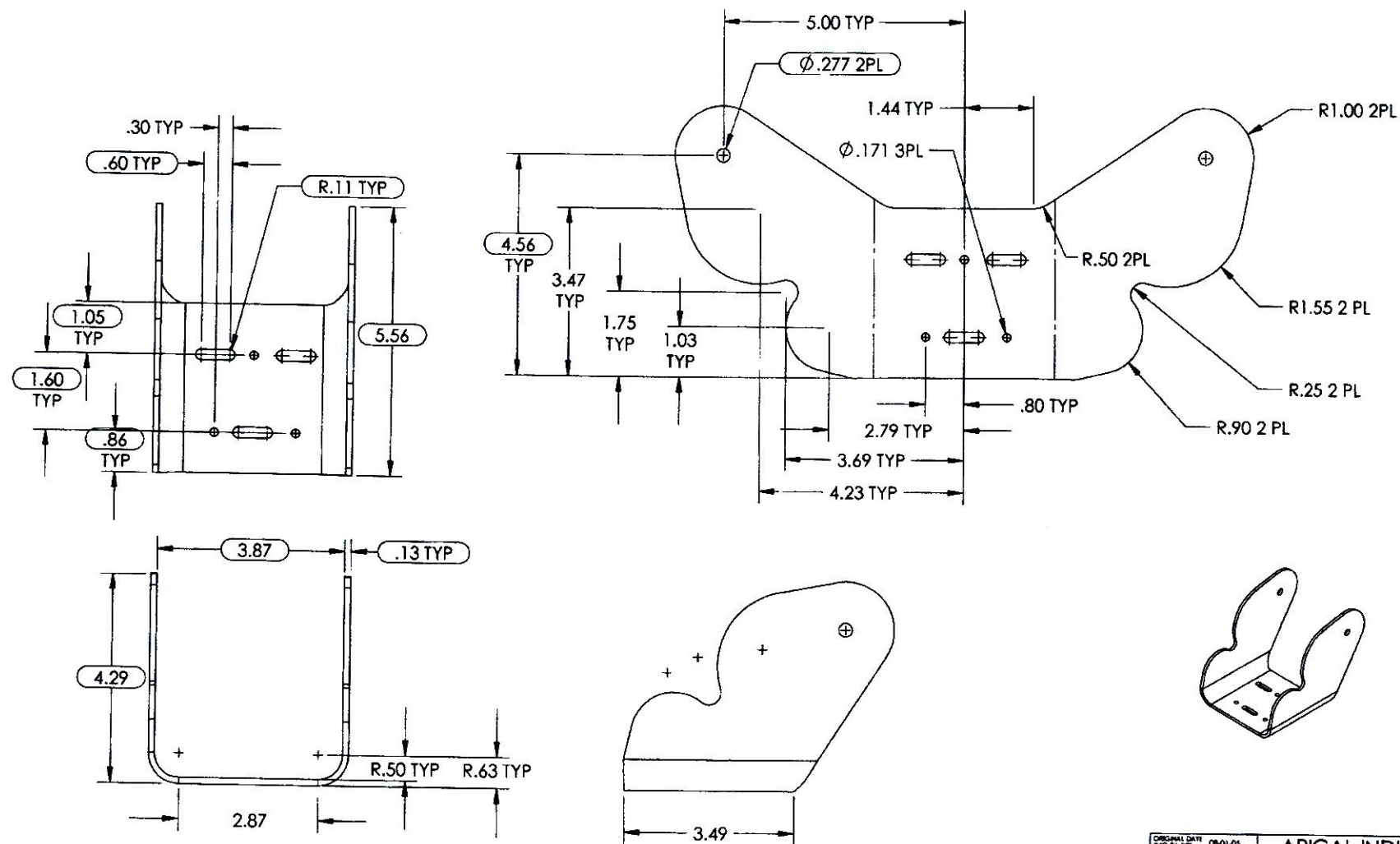


644.4110
BRACKET (LARGE), AFT

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ORIGINAL DATE 08-01-05	APICAL INDUSTRIES		
DRAWN BY D. FARRINGTON	2608 TEMPLE HEIGHTS DR.		
CHECKED BY S. JOSEPH	OCEANSIDE, CA. 92056-3512 (760)724-5300		
DRAWING APPROVAL S. JOSEPH 08-29-05	PIVOT STEP ASSY		
CONTRACT NO.	SRT (CAGE CODE) B 07M26	DWG. NO. 644.4100	REV. F
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES ARE: 2 PLACE DECIMALS ±.05 3 PLACE DECIMALS ±.010 ANGLES ±.5°	SCALE NONE		
SHEET 2 OF 16			

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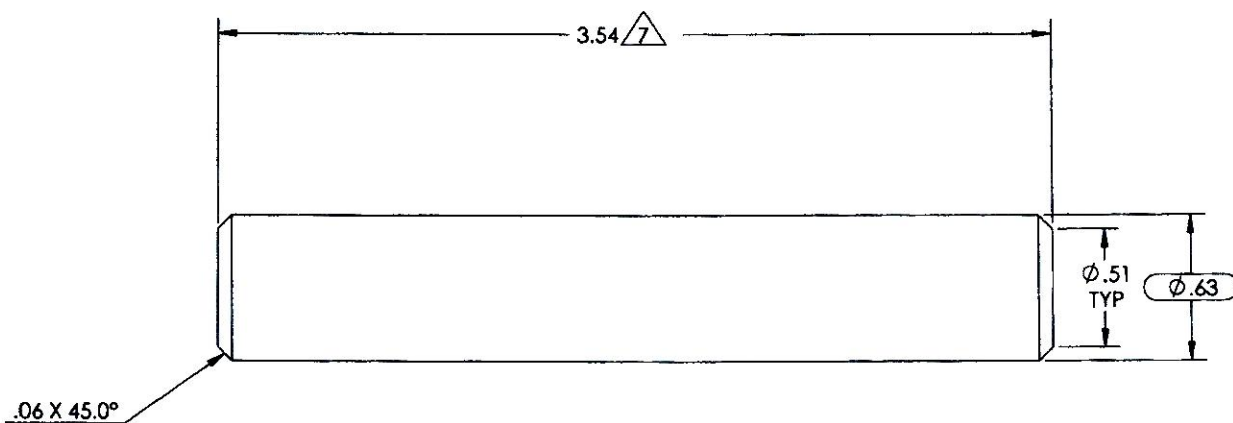


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644.4111
BRACKET, AFT PIVOT

ORIGINAL DATE: 08-01-05		APICAL INDUSTRIES	
DRAWN BY: J. JOSEPH		2608 TEMPLE HEIGHTS DR.	
CHECKED BY: J. JOSEPH		OCEANSIDE, CA 92056-3512 (760)724-5300	
DRAWING APPROVAL: J. JOSEPH 08-27-05		PIVOT STEP ASSY	
CONTRACT NO.:		SCALE: NONE	
UNLESS OTHERWISE SPECIFIED, DIMENSIONS ARE IN INCHES. TOLERANCES ARE: 2 PLACE DECIMALS ± .01, 3 PLACE DECIMALS ± .005, ANGLES: 1° - 3°		REV: B	REV: F
CAGE CODE: 07MA26	QWG. NO. 644.4100	SHEET 3 OF 14	

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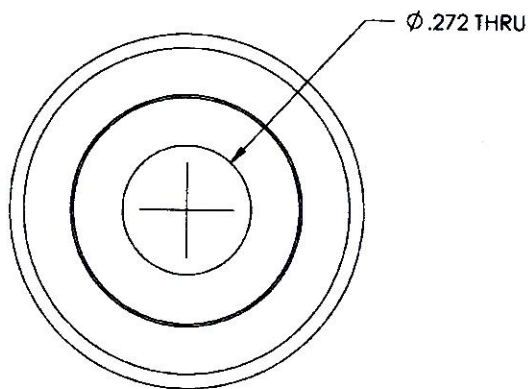
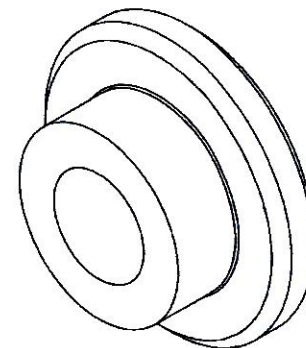
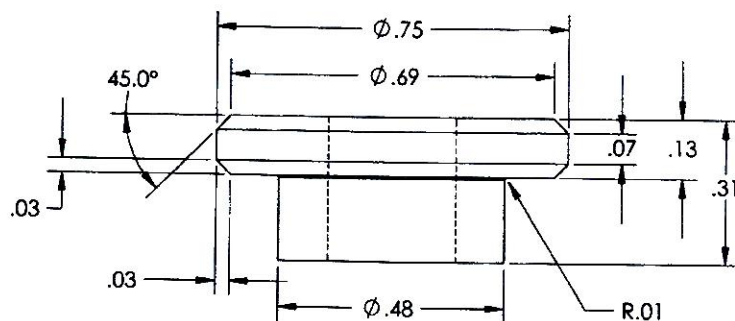


644.4112
SPACER

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ORIGINAL DATE 08-01-05	APICAL INDUSTRIES	
DRAWN BY S. JOSEPH	2608 TEMPLE HEIGHTS DR. OCEANSIDE, CA 92056-3512 (760)724-5300	
CHECKED BY S. JOSEPH	PIVOT STEP ASSY	
DATE 08-29-05	REV B	QTY 1
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES ARE: 3 PLACE DECIMALS ±.010 ANGLES ±.5°	SCALE NONE	SHEET 4 OF 16

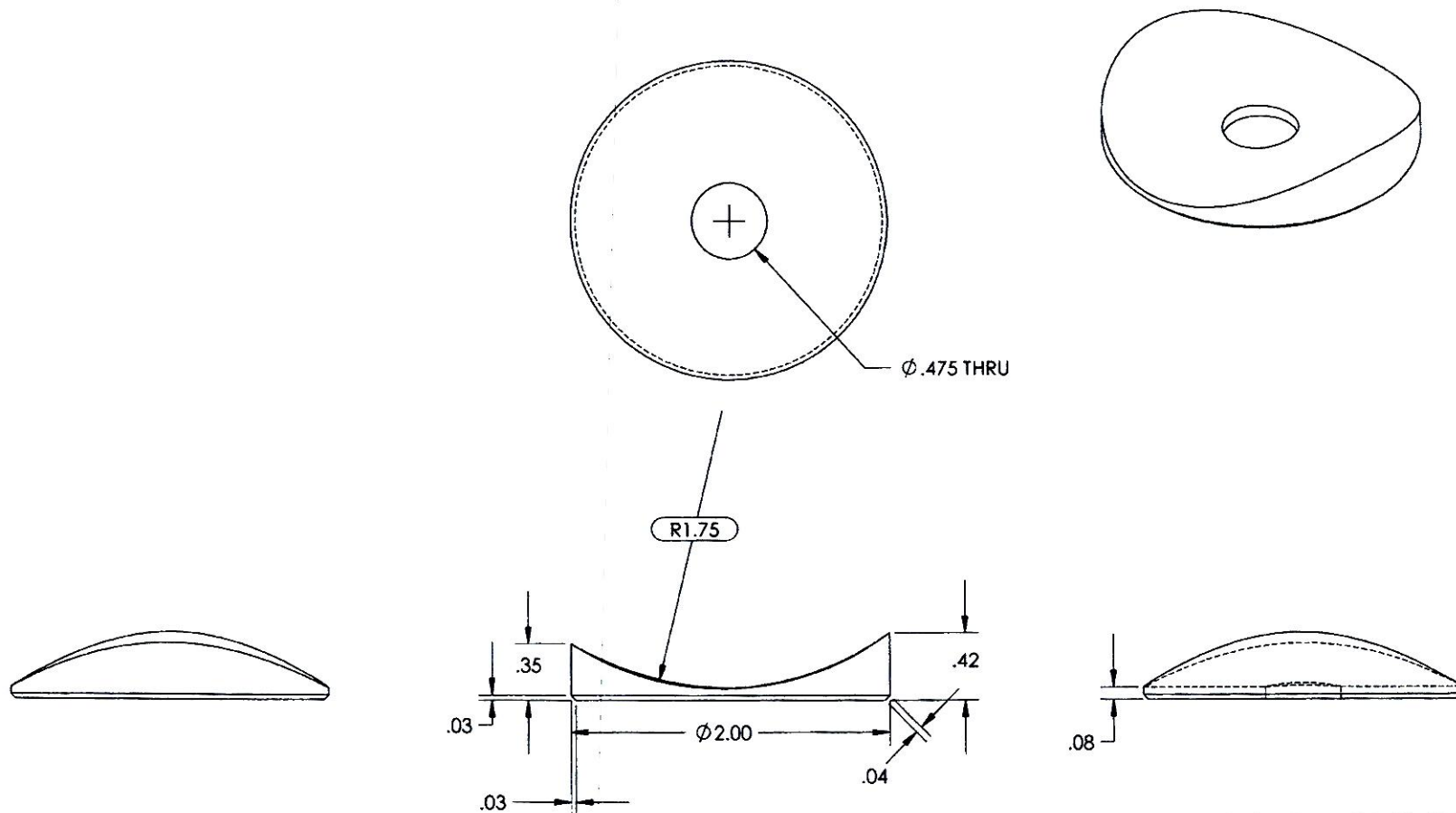
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SPACER, STOP

ORIGINAL DATE 08-01-05	APICAL INDUSTRIES	
DRAWN BY J. JOSEPH	2608 TEMPLE HEIGHTS DR. OCEANSIDE, CA. 92056-3512 (760)724-5300	
CHECKED J. JOSEPH		
DRAWING APPROVAL J. JOSEPH 08-09-05	PIVOT STEP ASSY	
CONTRACT NO.		
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES ARE: 3 PLACE DECIMALS ±.003 2 PLACE DECIMALS ±.010 ANGLES ±.5°	SET B	CAGE CODE 07M26
	DWG. NO. 644.4100	REV. F
	SCALE NONE	SHEET 5 OF 16

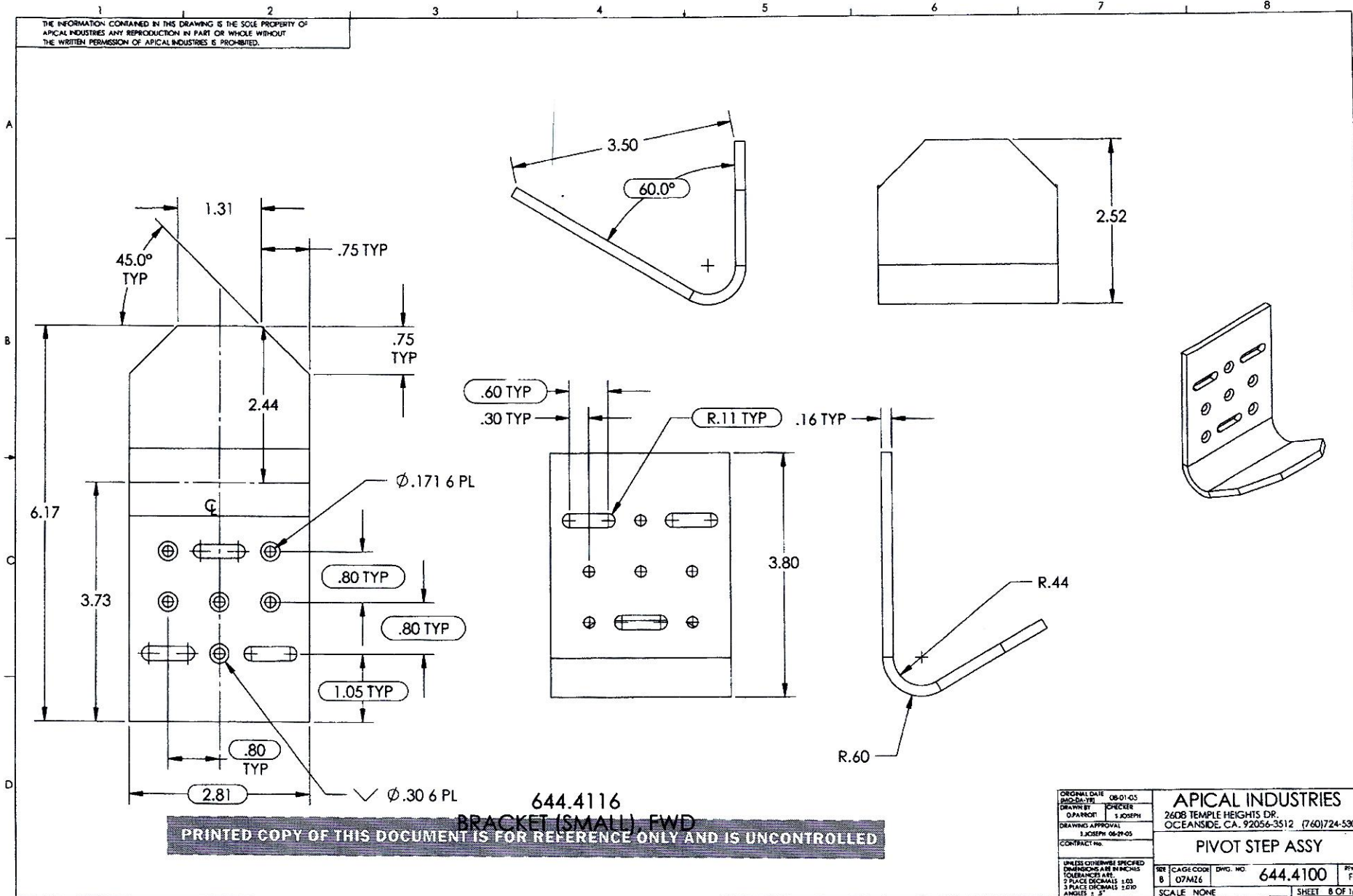
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644.4114
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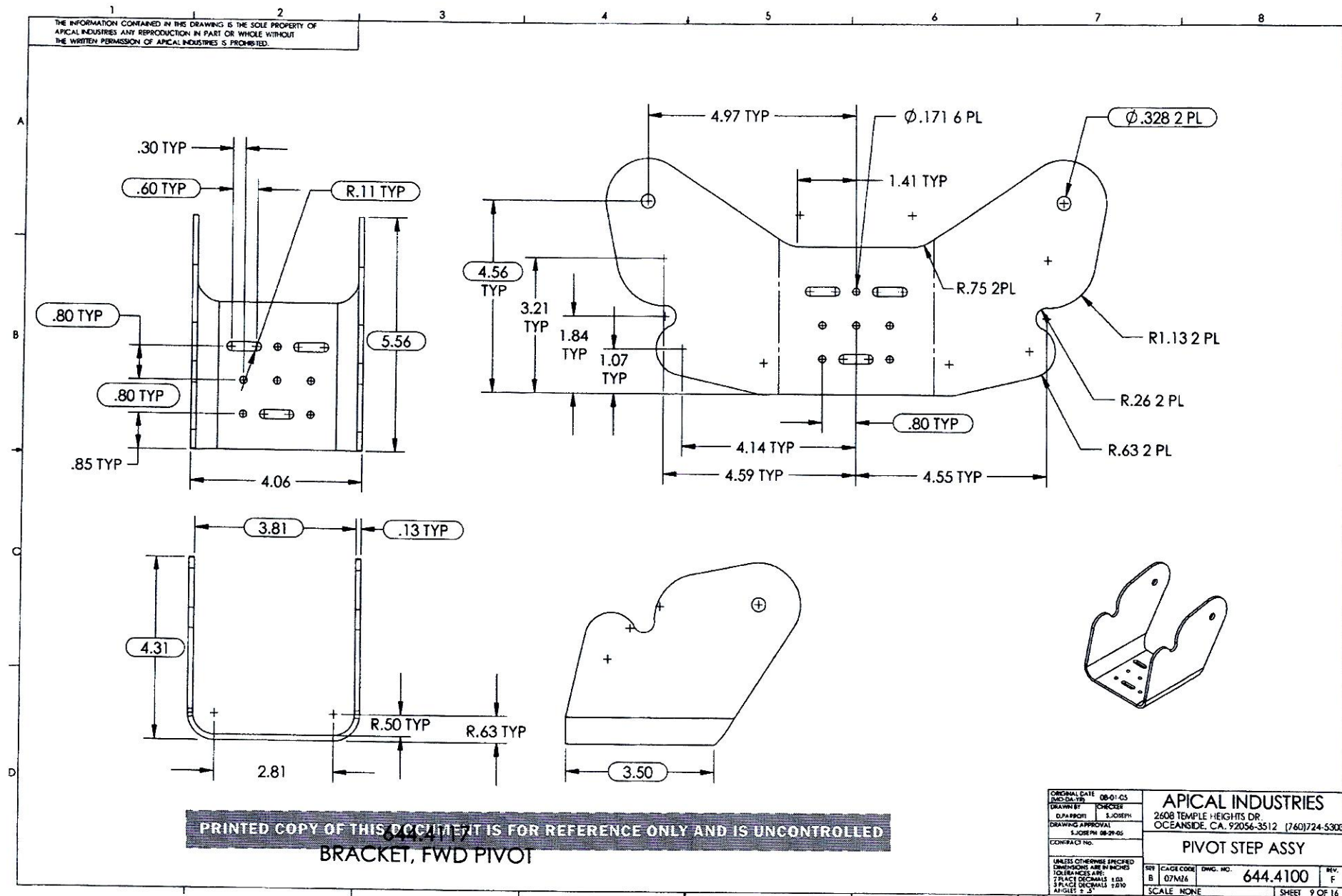
ORIGINAL DATE 08-01-05	APICAL INDUSTRIES	
DRAWN BY D. PARROTT	2608 TEMPLE HEIGHTS DR. OCEANSIDE, CA. 92056-3512 (760)724-5300	
CHECKER S. JOSEPH	PIVOT STEP ASSY	
DRAWING APPROVAL S. JOSEPH 08-29-05	SIZE B	DWG. NO. 644.4100
CONTRACT NO.	SCALE NONE	SHEET 4 OF 16
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES ARE: 2 PLACE DECIMALS $\pm .03$ 3 PLACE DECIMALS $\pm .010$ ANGLES $\pm .5^\circ$		

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ORIGINAL DATE 08-01-05	APICAL INDUSTRIES		
DRAWN BY D. PARRON	2608 TEMPLE HEIGHTS DR. OCEANSIDE, CA. 92056-3512 (760)724-5300		
CHECKED BY S. JOSEPH	PIVOT STEP ASSY		
DRAWING APPROVAL S. JOSEPH 08-01-05			
CONTRACT NO.			
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES ARE: 2 PLACE DECIMALS ±.02 3 PLACE DECIMALS ±.010 ANGLES ±.5°	SERIAL B	CAGE CODE 07M26	REV. F
	DWG. NO. 644.4100	SHEET 8 OF 16	
	SCALE: NONE		

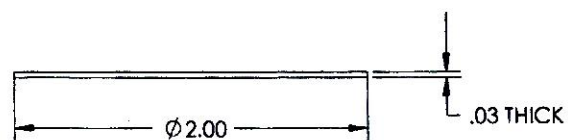
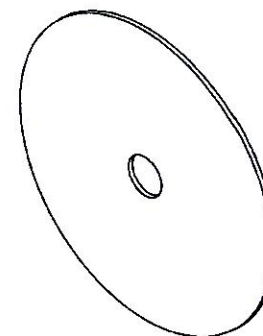
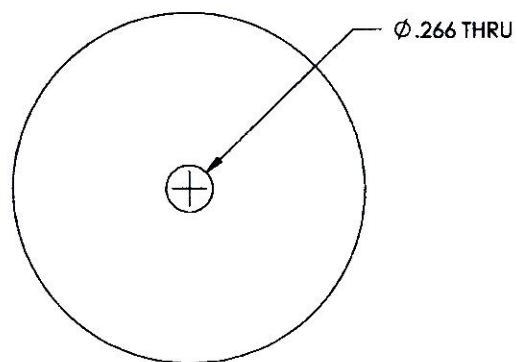
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BRACKET, FWD PIVOT

ORIGINAL DATE: 08-01-05		APICAL INDUSTRIES	
DRAWN BY: J. JOSEPH		2608 TEMPLE HEIGHTS DR.	
DRAWING APPROVAL: J. JOSEPH		OCEANSIDE, CA. 92056-3512 (760)724-5300	
CONTRACT NO.		PIVOT STEP ASSY	
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES ARE: 2 PLACE DECIMALS: ±.03 3 PLACE DECIMALS: ±.010 ANGLES: ±.5°		SHEET: 9 OF 16	REV. F
SCALE: NONE		644.4100	

1 2 3 4 5 6 7 8
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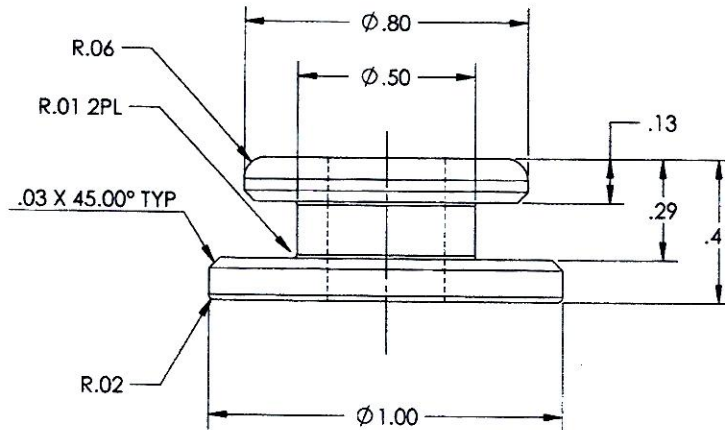
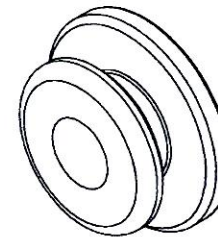
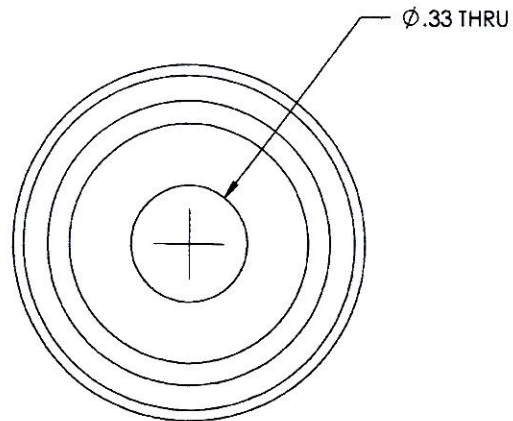


644.4118
WASHER, NYLON

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ORIGINAL DATE	08-01-05	APICAL INDUSTRIES	
DRAWN BY	CHECKER	2608 TEMPLE HEIGHTS DR.	
DRAWING APPROVAL	ENGINEER	OCEANSIDE, CA. 92056-3512 (760)724-5300	
CONTRACT NO.	644.4118	PIVOT STEP ASSY	
UNLESS OTHERWISE SPECIFIED: DIMENSIONS ARE IN INCHES TOLERANCES ARE: 3 PLACE DECIMALS ±.003 ANGLES ±.5°	SEE CAGE CODE 8 07M26	DWG. NO. 644.4100	REV. F
SCALE: NONE		SHEET 10 OF 16	

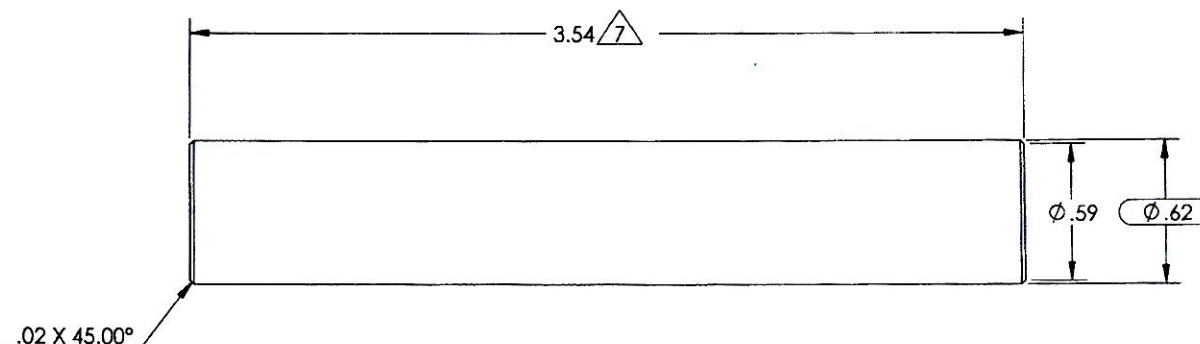
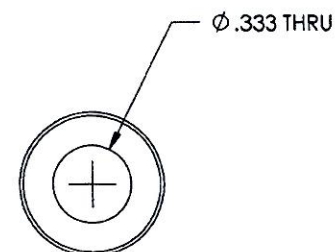
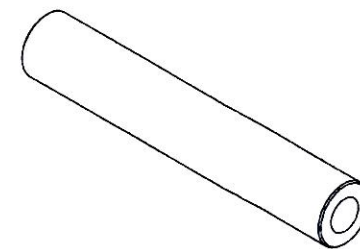
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644.4119
SPACER, FWD STOP
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ORIGINAL DATE 08-01-06		APICAL INDUSTRIES	
DRAWN BY	CHECKER	2608 TEMPLE HEIGHTS DR.	
DRAWN BY	CHECKER	OCEANSIDE, CA. 92056-3512 (760)724-5300	
DRAWING APPROVAL	1.106PM 08-29-05	PIVOT STEP ASSY	
CONTRACT NO.			
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES ARE: 3 PLACE DECIMALS ±.003 ANGLES ±.2°		SHEET 11 OF 16	REV. F
CAGE CODE	DWG NO.	644.4100	
B	07N16	SCALE NONE	

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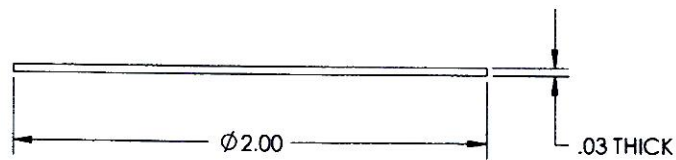
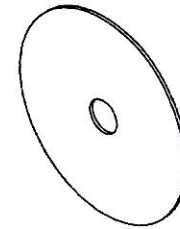
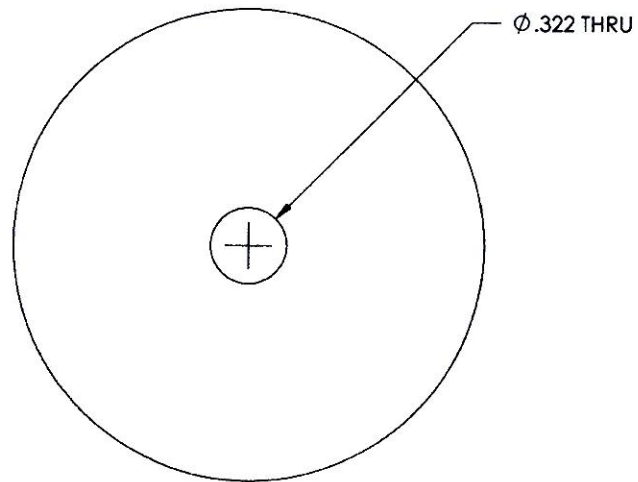


644.4120
SPACER, CROSS-TUBE

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ORIGINAL DATE 11-02-01	DESIGN 08-01-05	APICAL INDUSTRIES	
DRAWN BY D. PARROTT	CHECKED S. JOSEPH	2608 TEMPLE HEIGHTS DR. OCEANSIDE, CA. 92056-3512 (760) 724-5300	
DRAWING APPROVAL S. JOSEPH 08-29-05	CONTACT NO.	PIVOT STEP ASSY	
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES ARE: 2 PLACE DECIMALS 1.00 3 PLACE DECIMALS 0.010 ANGLES ± .5°		SHEET B 07M16	DWG NO. 644.4100
SCALE NONE		REV. F	
		SHEET 12 OF 16	

1 2 3 4 5 6 7 8
A
B
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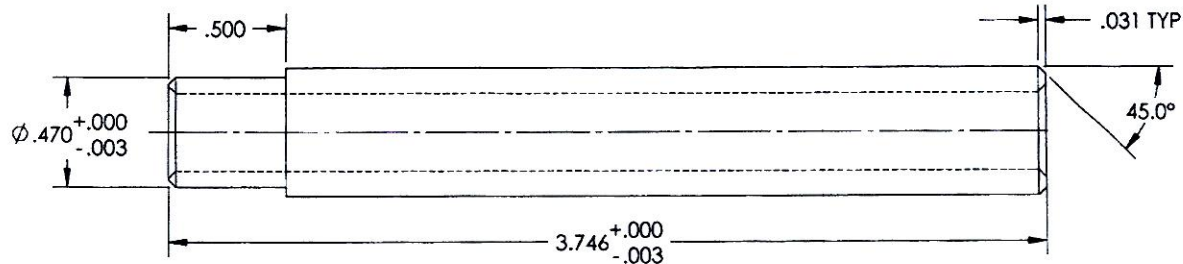
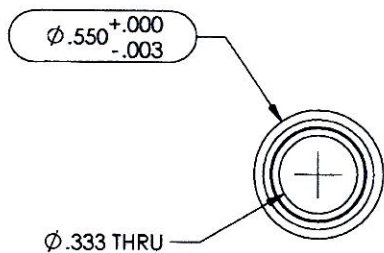


644.4121
WASHER, NYLON

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ORIGINAL DATE	08-01-05	APICAL INDUSTRIES	
DRAWN BY	C. CREER	2608 TEMPLE HEIGHTS DR.	
DRAWING APPROVAL	S. JOSEPH	OCEANSIDE, CA. 92056-3512 (760)724-5380	
CONTRACT NO.		PIVOT STEP ASSY	
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES ARE: 2 PLACE DECIMALS ±.01 3 PLACE DECIMALS ±.010 ANGLES ±.5°		SHEET	REV
SCALE NONE		644.4100	F
		SHEET 13 OF 16	

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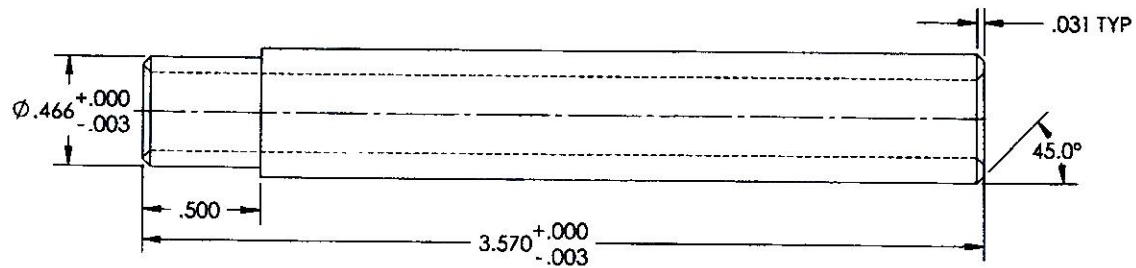
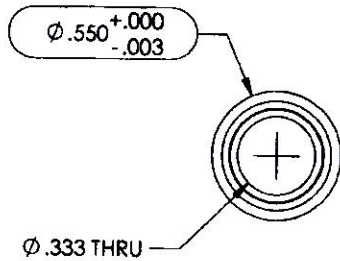


644.4122

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ORIGINAL DATE 08-01-05		APICAL INDUSTRIES	
DRAWN BY D. PARROTT		2608 TEMPLE HEIGHTS DR.	
CHECKED J. JOSEPH		OCEANSIDE, CA. 92056-3512 (760)724-5300	
DRAWING APPROVAL J. JOSEPH 08-29-05		PIVOT STEP ASSY	
CONTRACT NO.		SIZE / CAGE CODE B / 07MA26	DWG. NO. 644.4100
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES ARE: 2 PLACE DECIMALS ±.01 3 PLACE DECIMALS ±.001 ANGLES ±.5°		SCALE: NONE	SHEET 14 OF 16

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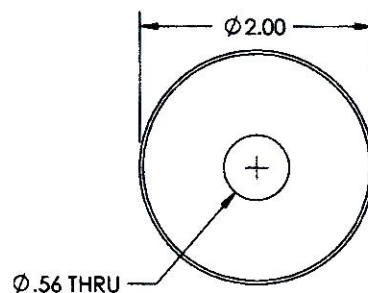
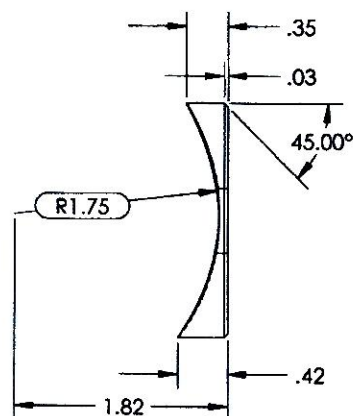


644.4123

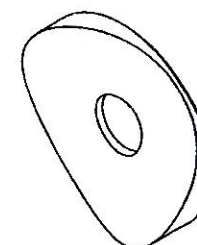
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ORIGINAL DATE 08-01-05		APICAL INDUSTRIES	
DRAWN BY D. PARSONS		2608 TEMPLE HEIGHTS DR. OCEANSIDE, CA. 92056-3512 (760)724-5300	
DRAWING APPROVAL L. JOSEPH 08-29-05		PIVOT STEP ASSY	
CONTRACT NO.		REV. NO.	REV.
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES ARE: 2 PLACE DECIMALS ± .02 3 PLACE DECIMALS ± .010 ANGLES ± .5°		SCALE: NONE	SHEET 15 OF 16

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644.4124



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ORIGINAL DATE 08-01-05		APICAL INDUSTRIES	
DRAWN BY T. JOSEPH		2608 TEMPLE HEIGHTS DR. OCEANSIDE, CA. 92056-3512 (760)724-5300	
CHECKED BY T. JOSEPH		PIVOT STEP ASSY	
DRAWING APPROVAL T. JOSEPH 08-22-05		SCALE : NONE	
CONTRACT NO.		SHEET 16 OF 16	
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES ARE: 3 PLACE DECIMALS ±.010 ANGLES 1°		REV. CODE B 07M26	REV. NO. 644.4100



Dart Aerospace Ltd.
1270 Aberdeen Street
Hawkesbury, ON K6A 1K7
Tel: 613 632 9577
Fax: 613 632 1053

PURCHASE ORDER

Purchase Order ID **PO34644**

Purchase Order Date 12/15/2016
PO Print Date 12/21/2016

Page Number 6 of 7

Order From :

A.T.G. INDUSTRIES INC.
731 INDUSTRIELLE ROAD
ROCKLAND, ON K4K 1T2
CANADA

VC-ATG001

Ship To : DART AEROSPACE LTD

1270 ABERDEEN
HAWKESBURY, ON K6A 1K7
CANADA

Contact Name

Vendor Phone

613-446-4544

Ship To Contact

Ship To Phone

Ship Via:

Ship Acct:

VENDOR'S TRUCK

Buyer

Customer POID

Customer Tax #

Terms

Currency

FOB

Chantal Lavoie

10127-2607

Net 30

CAD

FCA - (Free Carrier)

15	154270	644.4112 SPACER REV. F2	12/22/2016	14.00	\$4.95	\$69.30
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Yes

12/22/2016

FINISH: HARD ANODIZE IAW MIL-A-8625 TYPE 3 CLASS 2, COLOR BLACK

DAS
9
9-89

Line Total:

\$69.30

16	151598	D1038-58B RAIL REV. B	12/22/2016	50.00	\$3.25	\$162.50
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Yes

12/22/2016

FINISH: Anodize per MIL-A-8625F Type I or IB or IC or II or IIB Class 2, Type III Class 2
COLOR BLACK

Line Total:

\$162.50

17	154100	D5046-041 CO-PILOT REV. B	12/22/2016	2.00	\$6.25	\$12.50
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Yes

12/22/2016

FINISH: Anodize per MIL-A-8625F Type I or IB or IC or II or IIB Class 2, Type III Class 2
COLOR BLACK

Line Total:

\$12.50

PO Instructions: PRIMER IS SUPPLIED BY DART

Note:

12/21/2016



A.T.G. INDUSTRIES INC.
731 INDUSTRIELLE STREET
ROCKLAND, ON K4K 1T2
Canada

Ph: (613) 446-4544

Fax: (613) 446-4556

Pack List

Number: 912727

Date: 20-Dec-16

To

Dart Aerospace Ltd
1270 Aberdeen St
Hawkesbury, ON K6A 1K7

Ship To

CHANTAL LAVOIE
Dart Aerospace Ltd
1270 Aberdeen St
Hawkesbury, ON K6A 1K7

Ph: 613 632-9577

Fax: 613 632-1053

Ph: 613 632-9577

Fax: 613 632-1053

Terms		Ship Via	
Quantity	Description		
	PLEASE REFERENCE THE PACK LIST NUMBER ON ALL CORRESPONDENCE TO THIS SHIPMENT. IF YOU HAVE ANY QUESTIONS, PLEASE CALL AT (613) 446-4544.		
7 ea	Part: 644.4122 Bushing Hard Black Anodize per MIL-A-8625F, Type III, Class 2 Job: 20512	Rev: F2 Line: 11	
7 ea	Part: 644.4120 Spacer Hard Black Anodize per MIL-A-8625F, Type III, Class 2 Job: 20513	Rev: F2 Line: 12	
14 ea	Part: 644.4119 Spacer Hard Black Anodize per MIL-A-8625F, Type III, Class 2 Job: 20514	Rev: F2 Line: 13	
14 ea	Part: 644.4113 Spacer Hard Black Anodize per MIL-A-8625F, Type III, Class 2 Job: 20515	Rev: F2 Line: 14	
14 ea	Part: 644.4112 Spacer Hard Black Anodize per MIL-A-8625F, Type III, Class 2 Job: 20516	Rev: F2 Line: 15	
50 ea	Part: D1038-58B Rail Black Anodize per MIL-A-8625F, Type II, Class 2 Job: 20517	Rev: B Line: 16	
2	Part: D5046-041	Rev: B	



A.T.G. INDUSTRIES INC.
731 INDUSTRIELLE STREET
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Dart Aerospace Ltd
1270 Aberdeen St
Hawkesbury, ON K6A 1K7

Ship To

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Dart Aerospace Ltd
1270 Aberdeen St
Hawkesbury, ON K6A 1K7

Ph: 613 632-9577

Fax: 613 632-1053

Ph: 613 632-9577

Fax: 613 632-1053

Terms		Ship Via	
Quantity	Description		
ea	Co-pilot Black Anodize per MIL-A-8625F, Type II, Class 2 Job: 20518 PO: PO34644 Line: 17		
DATE: <u>20/12/16</u>			
CERTIFIED SIGNATURE: <u>[Signature]</u>			
RECEIVER SIGNATURE: <u>[Signature]</u>			
Note: This Packing Slip may contain parts that have been PLATED. Items that are plated may be subject to natural tarnishing and it is suggested that they be inspected within 24 hours of receipt.			
CERTIFICATE OF CONFORMANCE			
A.T.G. INDUSTRIES INC. CERTIFIES THAT ALL ITEMS IN THIS SHIPMENT CONFORM TO REQUIREMENTS.			
MADE IN CANADA.			